CARLSBAD HISTORIC VILLAGE DISTRICT TREE REPORT

IMPACTS FROM IMPLEMENTING RECOMMENDATIONS

No.	Recommendation Details	Budgetary Impacts	Staffing Impacts	Related Data
1.	City Arborist to provide copies of this report to each City employee in charge of managing a Heritage Tree and to every property owner of a Heritage Tree located on private property. In some locations it is unclear if a tree is publicly or privately owned and who is responsible for its care. These tree locations should be clarified by the City Arborist.	Printing and mailing or distribution expenditures estimated at \$1800.	Limited and temporary, and could therefore be accommodated within the normal workload.	All tree locations have been clarified by City staff and the author or the Heritage Tree Report.
2.	Have all public Heritage Trees inspected at least annually by a qualified certified arborist who shall provide written recommendations for any required maintenance including pruning. The reports are to be kept in a permanent file for each tree for future reference along with a record of any work performed on the tree and the result of that work.	Professional services expenditures for a consulting arborist and records retention estimated at \$26,400 annually.	Limited, and could therefore be accommodated within the normal workload.	Suggested that the costs be accounted for, and the drafting of reports commence in FY 08-09.
3.	Remove any signs or wires that have been attached to any publicly-owned Heritage Tree, if this can be done without damaging the tree any further. Do not remove any signs of historic significance attached to the tree.	No significant impact.	No significant impact.	Staff currently removes signs or wires attached to City-owned trees.
4.	Adopt a City policy or regulation prohibiting the "topping" of any public tree.	No significant impact.	No significant impact.	Municipal Codes address this practice.
5.	Adopt a City policy or regulation that the appropriate pruning standards will be followed when pruning publicly-owned trees. The standards would include the "Best Management Practices – Tree Pruning" published by the International Society of Arboriculture and the "American National Standards for Tree Care Operations, ANSI A300 (Part 1)-2001 Pruning" and any safety standards that apply.	No significant impact.	No significant impact.	Municipal Codes address the adoption of appropriate pruning standards for City-owned trees, via the Community Forest Management Plan.
6.	Require that all pruning work on publicly-owned Heritage Trees would be performed by a certified arborist or by certified tree workers under the full-time supervision of a certified arborist. Certifications are to be current.	No significant impact.	Necessitates temporary staffing shifts and/or scheduling adjustments to the normal workload.	Approximately half of the pruning work on City-owned trees currently performed in this manner.
7.	Pruning should be timed so as not to interfere with nesting birds.	No significant impact.	No significant impact.	Staff currently prunes in this manner.
8.	Root damage to publicly-owned Heritage Trees should be minimized. Any proposed construction work under the canopy or within 100' of the trunk of the tree to be reviewed by a qualified certified arborist during the planning stage of the work. The arborist shall specify a Tree Protection Zone and a Tree Protection and Preservation Plan that is site and tree specific. No activity or soil disturbance in the Tree Protection Zone will be permitted unless specifically approved in writing.	Professional services expenditures for a consulting arborist estimated at \$2,250 annually.	No significant impact.	Suggested that the costs be accounted for, and that the program commence in FY 08-09.

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9.	In the vicinity of publicly-owned Heritage Trees appropriate alternative means of underground construction, such as the use of tools like an "Air-Knife" or "Air-Spade", boring or tunneling, should be utilized to protect and prevent damage to the root system of the tree.	Estimations are that such construction work can be twice as costly as traditional means.	Estimations are that such construction work can be twice as labor intensive as traditional means.	Specific project scopes would be required to quantify the precise amount of additional expense & staff/contract time.
10.	Hardscape conflicts should be remedied without damaging the root system of a publicly-owned Heritage Tree. Some methods that may be utilized include: the use of flexible paving such as sand laid unit pavers like brick or rubber sidewalk sections; grinding raised pavement sections; ramping or bridging over roots with pliable paving or wooden walkways; removing pavement and replacing it with decomposed granite or mulch; rerouting the hardscape to accommodate the current and future trunk expansion and root growth, even if it means the loss of a parking spot or two. This would also provide additional exposed soil surface that would be beneficial to the tree's health.	Some alternative work can be more costly; while other alternative work can be less costly.	Some alternative work can be more labor intensive; while other alternative work can be less labor intensive.	Specific project scopes would be required to quantify the precise amount of additional (if any) expense & staff/contract time.
11.	Turf, at least under the drip line of the tree, should be covered with a 3"-4" deep layer of organic mulch such as ground or chipped tree prunings. The mulch should be kept at least 1' away from the trunk of the tree. The mulch should be inspected at least twice a year and additional mulch added when it has been reduced to a depth of 1" or less through decomposition. The mulch cover will shade and kill the grass. For small trees, or trees with a narrow upright growth habit, install the mulch to at least a 5' distance from the trunk.	Mulch procurement and delivery estimated at \$1,000 annually.	No significant impact.	This practice would only be feasible in certain locations, predominantly City park sites, where hardscapes, appurtenances, amenities, or adjacent properties are not in conflict.
12.	Compaction under the canopies of trees can be partially corrected by several methods. The least damaging and costly method is to install organic mulch as specified above for turf removal over the compacted area or where surface roots are exposed.	Mulch procurement and delivery estimated at \$1,000 annually.	No significant impact.	This practice would only be feasible in certain locations, predominantly City park sites, as noted above.
13.	Require a report from a qualified certified arborist for any public Heritage Tree recommended for removal because it represents a "hazardous" condition. The arborist shall use a national standard, the 'ISA – Hazard Evaluation Form", as a method to determine the hazard rating of a tree. The City Arborist has the discretionary right to approve, request a second opinion in writing, or recommend actions that may reduce the condition to a less than significant level of hazard. If this type of hazard reduction cannot be done and it is the City's Arborist's recommendation to remove the tree it will remain the City Council's option to approve or deny the removal or require additional measures.	No significant impact.	No significant impact.	Municipal Codes address the protection of these trees, and stipulates the process that must be followed for any potential removals.
14.	For any publicly-owned Heritage Tree that is removed a suitable replacement tree shall be replanted.	No significant impact.	No significant impact.	Municipal Codes address replacement of City-owned trees.
15.	A Technical Manual for Trees modeled on the City of Palo Alto's should be developed for the City of Carlsbad. Such a manual would not only benefit the City's Heritage Trees, but all of the City's publicly-owned trees	No significant impact.	No significant impact.	Municipal Codes address the adoption the Community Forest Management Plan.